

Attorney Docket No: 40116/03601 (1513/1514)  
**REMARKS**

**I. INTRODUCTION**

Claims 1-17, 20 and 21 are pending in the present application. Applicants wish to thank the Examiner for indicating the allowability of claims 8, 9, 14 and 15 if rewritten in independent form. However, in view of the following remarks, it is respectfully submitted that all of the pending claims are allowable.

**II. THE U.S.C. §103(a) REJECTIONS SHOULD BE WITHDRAWN**

Claims 1, 4, 5, 7, 10-13, 16, and 20-21 stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 6,847,330 to Rada et al. (hereinafter "Rada") in view of U.S. Patent App. No. 2003/0083097 to Kim. 3/14/06 *Office Action*, pp. 2-6.

Rada discloses a wireless node with detachable antenna elements allowing lower band communications to be enabled/disabled based on the detection of the antenna elements. *Rada*, Abstract. Rada teaches a wireless node that allows a single or multiple antennae to be connected to various wireless circuitry. *Rada*, col. 2 lines 24-37. In addition to allowing different antennae to be connected to the wireless node, Rada teaches methods of detection of the attached antenna. *Rada*, col. 3 line 63-col. 6 line 64. The specification in Rada mentions various types of detection methods, and goes into detail regarding some embodiments of the detection process. In addition to the detection process, Rada discloses different modes of operation of the wireless node based on the detection process. "The mode of the base unit depends on if the antenna detector detects or fails to detect the antenna identifier." *Rada*, col. 1 lines 50-52.

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Independent claim 1 recites an access point for wireless communication comprising, "a housing including at least one module receiving slot and a first wireless communication radio" and "a removable module configured for insertion into the module receiving slot, the module including a second communication radio utilizing a second frequency band." Thus, claim 1 requires a first radio housed inside the housing and a second radio that is included as part of the removable module that is inserted into the module receiving slot. This modularity of the present invention allows the functionality of the access point to be increased with the insertion of different modules.

The Examiner has noted that Rada fails to show or disclose "a removable module configured for insertion into the module receiving slot, the module including a second communication radio utilizing a second frequency band," as recited in claim 1. The Examiner attempts to cure this deficiency with Kim.

Kim describes a system for controlling the operation of a mobile communication terminal capable of providing high-speed data rate (HDR) service. *Kim*, Abstract. A first antenna mounted to a mobile communication terminal is used in conjunction with a second detachable antenna during HDR service to minimize loss of received information resulting from signal fading. *Kim*, ¶ [0017]. The first antenna is part of a first RF module and the second antenna is part of a second RF module. *Id.*, ¶ [0018]. A controller is adapted to control a switch that supplies power from a battery to an RF receiver in the second RF module depending on whether the second antenna is connected to the RF receiver, whether an external terminal is connected to the mobile communication terminal, or whether the mobile communication terminal is in a traffic mode for the HDR service. *Id.*, ¶ [0020].

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Similar to Rada, Kim discloses a removable antenna (i.e., the second antenna)

which, when attached, enables an existing radio (i.e., the second RF module) disposed within a mobile device (i.e., the mobile communications terminal) to function. As noted by the Applicants in the previous Office Action Response, an antenna is not a radio device. Because the second RF module itself is integral with the terminal, it does not constitute “a removable module,” as recited in claim 1. Thus, Kim does not cure the deficiencies of Rada.

In addition, the second antenna of Kim receives the same signal as the first antenna and is only intended to mitigate the effects of signal fading. *Id.*, ¶ [0017]. Thus, the first RF module and the second RF module are functionally similar and allowing one module to operate at a frequency different from that of the other module would completely defeat the purpose of Kim’s invention. Thus, the second antenna does not “utiliz[e] a second frequency band,” as recited in claim 1.

Based on these reasons, it is respectfully submitted that neither Rada nor Kim, either alone or in combination, discloses or suggests “a housing including at least one module receiving slot and a first wireless communication radio” and “a removable module configured for insertion into the module receiving slot, the module including a second communication radio utilizing a second frequency band,” as recited in claim 1. Because claims 4, 5, 7 and 10 depend from, and, therefore include the limitations of claim 1, it is respectfully submitted that these claims are also allowable.

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Independent claim 11 recites a wireless access point comprising, “a first module including a first wireless communication radio” and “a housing including first and second receiving slots, the first module being mounted in a first receiving slot of the housing, the second receiving slot being capable of receiving a second removable module, the second module including a second wireless radio communicating utilizing a second frequency band.” Therefore, for at least the reasons discussed with respect to claim 1, it is respectfully submitted that claim 11 is allowable. Because claims 12 and 13 depend from, and, therefore include the limitations of claim 11, it is respectfully submitted that these claims are also allowable.

Independent claim 16 recites a wireless communication access point comprising, “a first wireless radio communicating on a first frequency band,” “a housing including at least one module receiving slot and housing the first radio,” and “at least one module selectively insertable into and removable from the slot, the module including one of an internal antenna and an external antenna for the first radio, and a second wireless radio communicating on a second frequency band.” Therefore, for at least the reasons discussed with respect to claim 1, it is respectfully submitted that claim 16 is allowable. Because claims 20 and 21 depend from, and, therefore include the limitations of claim 16, it is respectfully submitted that these claims are also allowable.

Claims 2 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Rada in view of by U.S. Patent App. No. 2003/0104791 to Engstrom et al. (hereinafter “Engstrom”). 3/14/06 *Office Action*, p. 6. Claim 3 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Rada and Engstrom in view of U.S. Patent App. No. 2004/0224646 to Bae. 3/14/06 *Office Action*, pp. 6-7. Claim 6 stands rejected

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under 35 U.S.C. 103(a) as being unpatentable over Rada in view of by U.S. Patent App. No. 2002/0118143 to Yokoshima et al. (hereinafter "Yokoshima"). 3/14/06 *Office Action*, p. 7.

With regards to claims 2, 3, 6 and 17, Engstrom, Bae and Yokoshima do not address the deficiencies of Rada and Kim as discussed with reference to independent claims 1, 11 and 16. Therefore, since each of these claims depend from one of claims 1, 11 and 16, for at least the reasons discussed in regard to claims 1, 11 and 16, it is respectfully submitted that claims 2, 3, 6 and 17 are allowable.

Claims 1-3, 5-7, 10-11, 16, 17 and 21 stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 5,913,173 to Ohwaki et al. (hereinafter "Ohwaki") in view of Kim. 3/14/06 *Office Action*, pp. 7-10.

Ohwaki discloses a radio-frequency device comprising a distributor and a tuner. *Ohwaki*, Abstract. A television signal is applied to an input terminal of the distributor and made available at first and second output terminals. *Id.*, col. 5, lines 61-65. When the tuner is combined with the distributor via the first output terminal, the signal from the second output terminal may be supplied to another tuner, allowing two-picture television or watching of one television screen while recording another program. *Id.*, col. 6, lines 9-13.

Ohwaki's device does not utilize wireless RF communications, but receives wired television signals through the input terminal. The tuner receives the wired television signals through a connection to the first output terminal and does not utilize wireless communication. Thus, Ohwaki does not disclose or suggest "a first wireless communication radio," as recited in claim 1.

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Because Ohwaki does not disclose wireless communications, one skilled in the art would not be motivated to combine Ohwaki with Kim, which relates to mobile communication terminals that utilize wireless data services. Ohwaki relates to neither wireless communication nor mobile devices.

However, assuming it were both possible and desirable to combine Ohwaki and Kim (which applicants continue to assert that it is not a proper combination), Ohwaki would still be deficient in that the signals of the first and second output terminals are identical. When a second tuner is attached, both tuners operate on the same signal. Therefore, even if the tuners could be considered wireless communication radios, the tuners would not operate on first and second frequency bands. As discussed above, Kim also teaches providing signal redundancy and thus does not cure this deficiency of Ohwaki.

Based on these reasons, it is respectfully submitted that neither Ohwaki nor Kim, either alone or in combination, discloses or suggests "a housing including at least one module receiving slot and a first wireless communication radio" and "a removable module configured for insertion into the module receiving slot, the module including a second communication radio utilizing a second frequency band," as recited in claim 1. Because claims 2-3, 5-7 and 10 depend from, and, therefore include the limitations of claim 1, it is respectfully submitted that these claims are also allowable.

Because independent claims 11 and 16 include limitations substantially similar to claim 1, it is respectfully submitted that claims 11 and 16 and all claims depending therefrom (claims 17 and 21) are allowable.

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Claims 4, 13 and 20 stand rejected under 35 U.S.C. 103(a) as unpatentable over Ohwaki in view of Kim and Rada. 3/14/06 *Office Action*, p. 10.

It is respectfully submitted that Rada does not cure the deficiencies of Ohwaki described with reference to independent claims 1, 11 and 16. Because claims 4, 13 and 20 depend from and include the limitations of claims 1, 11 and 16, respectively, it is respectfully submitted that these claims are allowable.

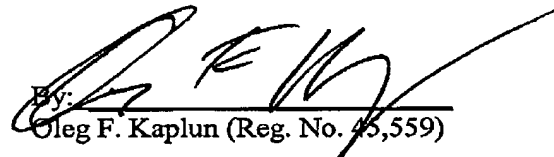
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**CONCLUSION**

In view of the remarks submitted above, Applicants respectfully submit that the present case is in condition for allowance. All issues raised by the Examiner have been addressed, and a favorable action on the merits is thus earnestly requested.

Respectfully submitted,

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